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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,051	11/09/2001	Yosuke Fujii	SIW-020	7833

959 7590 06/03/2004

LAHIVE & COCKFIELD, LLP.  
28 STATE STREET  
BOSTON, MA 02109

EXAMINER
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MAPLES, JOHN S

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/010,051

Applicant(s)

FUJII ET AL.

Examiner

John S. Maples

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 ~~is~~ are pending in the application.
- 4a) Of the above claim(s) 5-22 ~~is~~ are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 ~~is~~ are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. Claims 5-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 4.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Saitou et al.-US 6,599,651. (Saitou)

Reference is made to column 1, line 31-column 2, line 2 of Saitou along with column 9, lines 1-65 and Figures 2, 3 and 6. These portions of Saitou disclose the U-shaped gas channels in both the anode and cathode metal separators including the recited coolant inlet and outlets. In Saitou, the oxidant inlet and outlets are located on the side facing the electrolyte (also could be called a top side) on the oxidant separator plate while the fuel inlet and outlets are located on the side facing the electrolyte (top side) on the fuel separator plate. Thus the respective inlet/outlet of each of the oxidant and fuel separator plates are opposite to one another with respect to their location across the electrolyte. The inlets and outlets of each plate are positioned opposite one another through the electrolyte located between the two plates. Thus the claimed language is met by the teachings to Saitou.

Applicant's arguments have all been considered but are not deemed persuasive.

Applicant argues that Saitou does not teach a gas channel having an inlet and an outlet formed on

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the same side of a separator. It is true that the inlet and outlet are not on the same side of the separator in Saitou if you are designating the sides of the separator as right side and left side. However, both of the inlet and outlet are located on the top side of the separator, thus meeting the claimed subject matter.

A further argument by applicant is that Saitou does not teach the inlet/outlet of an oxidant channel being on an opposite side than the inlet/outlet of a fuel channel. This argument is not convincing because the said channels are opposite to one another with respect to the electrolyte located therebetween the oxidant separator and the fuel separator as set forth above in the description of the Saitou reference. In other words the oxidant inlet/outlet channel is situated on one side of the electrolyte while the fuel inlet/outlet channel is situated on the opposite side of the electrolyte.

4. Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujii et al.-US 6,528,196 (Fujii) or Yosida et al.-US 6,566,001 (Yosida)

See Figures 1, 3 and 4 of Fujii along with column 2, line 53-column 7, line 31. These portions of Fujii disclose the anode and cathode U-shaped gas channels in the respective separators and the recited coolant inlet and outlets in the said separators. In Fujii, the oxidant inlet and outlets are located on the side facing the electrolyte (also could be called a top side) on the oxidant separator plate while the fuel inlet and outlets are located on the side facing the electrolyte (top side) on the fuel separator plate, thus meeting the claimed subject matter.

Applicant's arguments relating to Fujii have been considered but are not persuasive. Applicant argues that Fujii does not teach a gas channel having an inlet and an outlet formed on the same side of a separator. It is true that the inlet and outlet are not on the same side of the

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separator in Saitou if you are designating the sides of the separator as right side and left side. However, both of the inlet and outlet are located on the top side of the separator, thus meeting the claimed subject matter.

A further argument by applicant is that Fujii does not teach the inlet/outlet of an oxidant channel being on an opposite side than the inlet/outlet of a fuel channel. This argument is not convincing because the said channels are opposite to one another with respect to the electrolyte located therebetween the oxidant separator and the fuel separator as set forth above in the description of the Saitou reference. In other words the oxidant inlet/outlet channel is situated on one side of the electrolyte while the fuel inlet/outlet channel is situated on the opposite side of the electrolyte.

Reference is made to Figures 1 and 3-5 of the patent to Yosida and column 3, line 14- column 4, line 62. . These portions of Yosida disclose the anode and cathode U-shaped gas channels in the respective separators and the recited coolant inlet and outlets in the said separators. In Yosida, the oxidant inlet and outlets are located on the side facing the electrolyte (also could be called a top side) on the oxidant separator plate while the fuel inlet and outlets are located on the side facing the electrolyte (top side) on the fuel separator plate.

Applicant's arguments relating to Yosida have been considered but are not persuasive. Applicant argues that Yosida does not teach a gas channel having an inlet and an outlet formed on the same side of a separator. It is true that the inlet and outlet are not on the same side of the separator in Saitou if you are designating the sides of the separator as right side and left side. However, both of the inlet and outlet are located on the top side of the separator, thus meeting the claimed subject matter.

A further argument by applicant is that Yosida does not teach the inlet/outlet of an oxidant channel being on an opposite side than the inlet/outlet of a fuel channel. This argument is not convincing because the said channels are opposite to one another with respect to the electrolyte located therebetween the oxidant separator and the fuel separator as set forth above in the description of the Saitou reference. In other words the oxidant inlet/outlet channel is situated on one side of the electrolyte while the fuel inlet/outlet channel is situated on the opposite side of the electrolyte.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

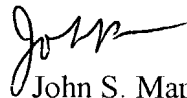
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Thursday from 6:15 to 3:45.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John S. Maples  
Primary Examiner  
Art Unit 1745

JSM/6-1-2004